

**Caution:** Parts can be damaged by electrostatic discharge. Keep parts in their containers until needed. Make sure you are properly grounded when touching static-sensitive components.



**Caution:** This part is not hot-pluggable. It is necessary to power off the library to replace this part.

This document explains how to replace the CompactFlash memory card on the Interface Manager card that is installed in an HP StorageWorks ESL E-Series tape library.



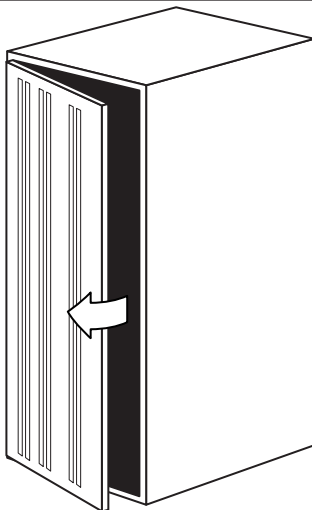
**Caution:** This procedure will cause all Interface Manager card configuration settings to be lost. You must reconfigure the Interface Manager card after replacing the CompactFlash card. These configuration settings are listed in the "Initial configuration steps" section of the *HP StorageWorks Interface Manager and Command View ESL User Guide*. If possible, write down all of the current configuration settings from the Interface Manager card before replacing the CompactFlash card.

## 1

Power off the library.

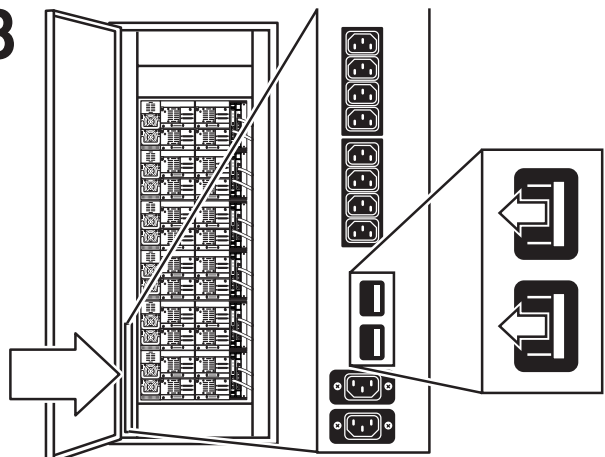
- Use your backup software to empty the picker or to verify that the picker is empty.
- Place the library off-line. From the **Home** screen of the operator control panel (OCP), press **Ops** to access the **Operations** screen.
- Verify that the OCP indicates that the cabinet is off-line.
- Press and hold the **power** button, located on the front of the library behind the laptop tray, until the OCP goes blank.

## 2



Open the back door of the library.

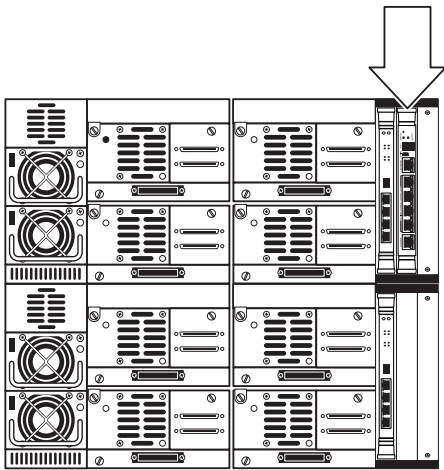
## 3



Flip the two breaker switches off (to the left) at the power distribution unit.

4

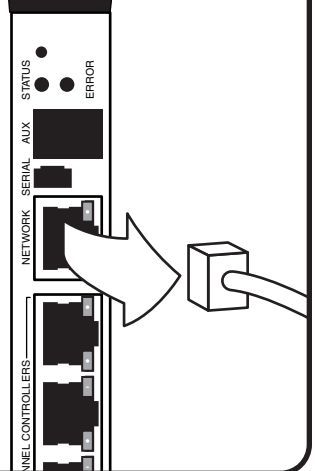
Identify the Interface Manager card. It is located in the top cluster, to the immediate right of the cluster controller.



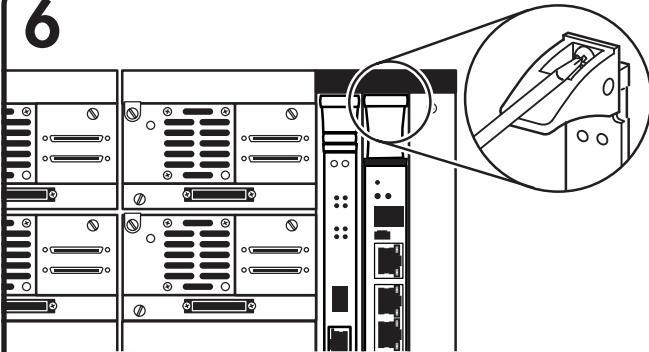
5

## Removing the Interface Manager Card

Note the location of all cables connected to the Interface Manager card, and then remove the cables.



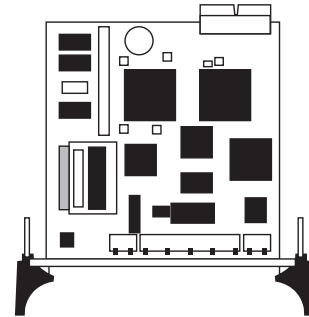
6



Use a #2 Phillips screwdriver to loosen the captive screws in the black ejector handles at both ends of the Interface Manager card. Push the ejector handles toward the outside, then pull them to remove the controller.

7

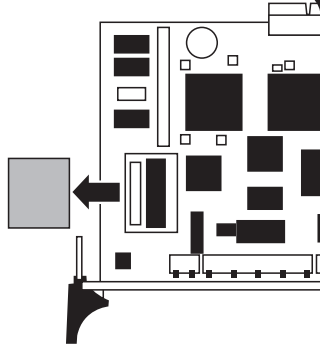
## Replacing the CompactFlash Card



- a. Position the existing Interface Manager card battery-side up to access the CompactFlash card.

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- b. Note the orientation of the CompactFlash card, then grasp the edges of the CompactFlash card and slide it out of the flash memory slot. If needed, push a pen into the corner notches of the flash memory slot to unseat the memory module.
- c. Remove the replacement CompactFlash card from its protective packaging and place it on your work surface.

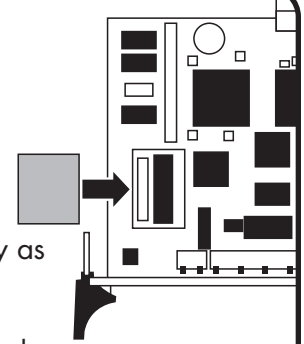


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- d. Insert the replacement CompactFlash card into the flash memory slot on the Interface Manager card exactly the same way as the original CompactFlash card was oriented. Gently slide the CompactFlash card into the slot until it is securely seated.



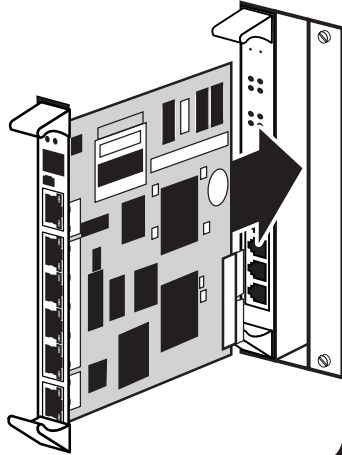
**Note:** If the CompactFlash card does not slide in easily, the card is upside down. Pull the card back out, turn it over, and reinsert it into the slot.



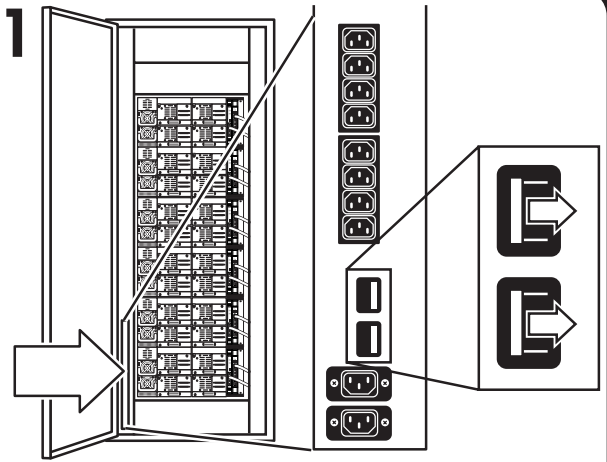
# 10

## Reinstalling the Interface Manager Card

Align the Interface Manager card with the guides in the library cluster controller bay and slide the Interface Manager card into the library. Tighten the captive screws.



# 11



Flip the two breaker switches on at the power distribution unit.

# 12

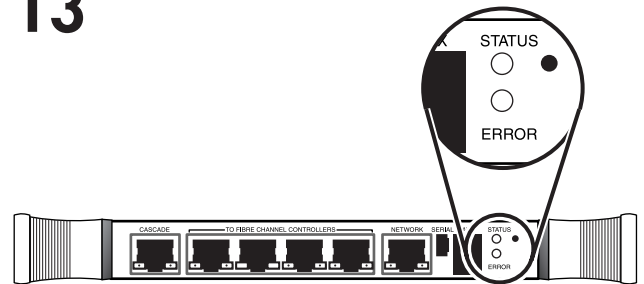
Power on the library.

- Verify that power cables are firmly in place.
- Press the power button located behind the laptop tray.
- Verify that the cabinet is on-line.



**Note:** To change the cabinet state, press **Ops** on the **Home** screen of the OCP to access the **Operations** screen.

# 13



Verify that the status LEDs indicate a normal state. For a description of LED diagnostic codes, refer to the "Troubleshooting" chapter of the *HP StorageWorks Interface Manager and Command View ESL Installation Guide*.

# 14

## Updating Firmware

After replacing the CompactFlash card, you must update the Interface Manager card firmware and reconfigure the Interface Manager settings. To operate with the ESL E-Series tape library, the Interface Manager card must have firmware version I120 or later. Firmware version I130 or later is required if any e2400-FC 2G controllers are installed in the library.

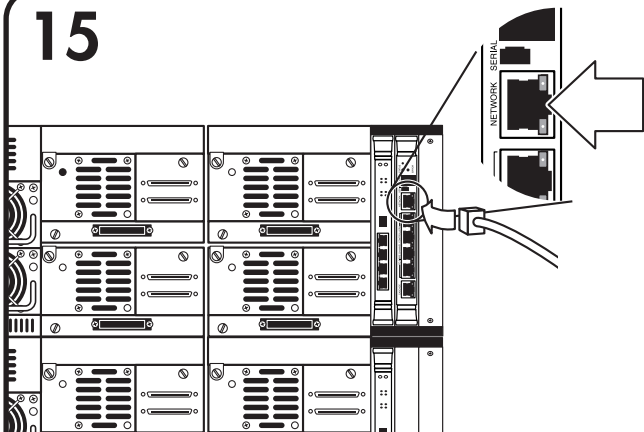
To update firmware:

- Acquire the latest firmware file from:  
<http://www.hp.com/support/cvesl>
- If necessary, transfer the firmware file to a client PC or laptop that will be used in step 3 to connect to the Interface Manager card.
- Use ftp to transfer the firmware file to a temporary storage area in the Interface Manager card's memory.
  - If connected, disconnect the Ethernet cable from the Network port on the Interface Manager card.

## Updating Firmware Continued

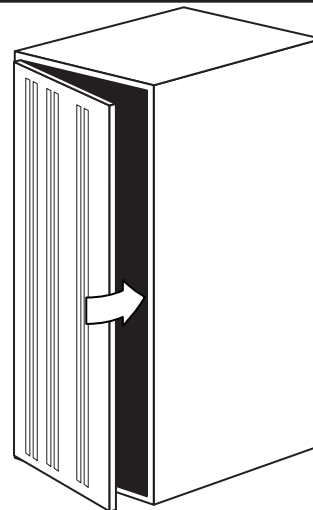
- b. Connect a host PC or laptop to the Cascade port of the Interface Manager card using an Ethernet cable.
  - c. On the host PC or laptop, open a command shell and navigate to the directory that the firmware you downloaded in step 1 is located.
  - d. Enter the following command: `ftp 192.168.2.1`
  - e. Login with the following credentials:
    - User name: `ftp`
    - Password: Use your e-mail address
  - f. If necessary, use the `ls` command to list the contents of the `ftp` directory.
  - g. Enter the following command to turn on binary transfer mode: `bin`
  - h. Enter the following command to copy the firmware file to the temporary location in the Interface Manager card's memory:  
`put <filename>`  
where `<filename>` is the filename of the firmware file.
  - i. Use the `quit` command to logoff the `ftp` session.
4. Start a Telnet session on the PC or laptop that is connected to the Interface Manager card via the cascade port:
    - a. From a command prompt, enter the following:  
`telnet 192.168.2.1`
    - b. At the login prompt, enter the following information:
      - Username: `cliadmin`
      - Password: `clipwd`
  5. Enter the following command to update the firmware:  
`download mgmt`
  6. Logoff the telnet connection and disconnect the host PC or laptop from the Cascade port of the Interface Manager card.
  7. Reconnect the cables to the Interface Manager card exactly as they were before.
  8. Refer to the "Initial configuration steps" section of the *HP StorageWorks Interface Manager and Command View ESL User Guide* for instructions on how to reconfigure the Interface Manager card. Because configuration information is stored on the CompactFlash card, the previous configuration is lost when the CompactFlash card is replaced.

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Reconnect the cables to the Interface Manager card exactly as they were connected to the original card.

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Close the back door of the library.

## Getting help

- HP product information:  
<http://www.hp.com/products/tapestorage>
- HP technical support and phone numbers:  
<http://www.hp.com/support>
- HP StorageWorks Library and Tape Tools (L&TT) diagnostic software:  
<http://www.hp.com/support/tapetools>
- Interface Manager and HP StorageWorks Command View ESL:  
<http://www.hp.com/support/cvesl>

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